

Title (en)  
METHOD FOR SELECTIVELY PHOSPHATING A COMPOSITE METAL CONSTRUCTION

Title (de)  
VERFAHREN ZUR SELEKTIVEN PHOSPHATIERUNG EINER VERBUNDMETALLKONSTRUKTION

Title (fr)  
PROCÉDÉ DE PHOSPHATATION SÉLECTIVE D'UNE CONSTRUCTION MÉTALLIQUE COMPOSITE

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Application  
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Abstract (en)  
[origin: CA2802035A1] The invention relates to a multistage method for treating composite metal constructions for corrosion protection, comprising metal surfaces of aluminum, zinc, and optionally iron, wherein, in the first step, the selective zinc phosphating of the zinc and iron surfaces is carried out using a phosphating solution, comprising water-soluble inorganic compounds of silicon in a quantity sufficient for suppressing pinholing on the zinc surfaces, but not exceeding a quantity at which the zinc phosphating loses selectivity. In the subsequent second step of the method according to the invention, the aluminum surfaces are passivated by means of an acid treatment solution. The invention further relates to a zinc phosphating solution suitable for use in the method according to the invention comprising at least 0.025 g/l, but less than 1 g/l of silicon in the form of water-soluble inorganic compounds calculated as SiF<sub>6</sub>, wherein the product (Si/mM)·(F/mM) of the concentration of silicon (Si in mM) in the form of water-soluble inorganic compounds and the concentration of free fluoride (F in mM) divided by the number of points of free acids is no greater than 5.

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